

## **REMARKS**

Reconsideration of the present application is respectfully requested in view of the following remarks. Prior to entry of this response, Claims 1-19 and 21-32 were pending in the application. In the Office Action dated July 18, 2008, Claims 1, 29, 30, and 31 were rejected under 35 U.S.C. § 112, first paragraph; Claim 1 was rejected under 35 U.S.C. § 112, second paragraph; and Claims 1-19 and 21-32 were rejected under 35 U.S.C. § 103. Applicants hereby address the Office Action's rejections in turn.

### Rejection of the Claims Under 35 U.S.C. § 112

The Office Action rejected Claims 1, 29, 30, and 31 under 35 U.S.C. § 112, first paragraph, as not being enabled by the disclosure. Claims 1, 29, 30, and 31 have been amended as presented above. The amendments are supported by the Specification (See page 9, lines 9-24). Applicants respectfully submit that amended Claims 1, 29, 30, and 31 are enabled by the disclosure, and the rejection should be withdrawn.

The Office Action also rejected Claim 1 under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter regarded as the invention. Applicants respectfully submit that amended Claim 1 is compliant with 35 U.S.C. § 112, second paragraph, and the rejection should be withdrawn.

### Rejection of the Claims Under 35 U.S.C. § 103(a)

The Office Action rejected Claims 1, 2, 4, 6 and 14 under 35 U.S.C. 103(a) as being unpatentable over *Wiebe et al.* (US 2002/0159089) in view of *Wang* (US 5,469,267) and further in view of *Ericson* (US 2002/0011989). Claim 1 has been amended as presented above. The

above rejections are addressed in order below and Applicants respectfully submit that the amendments overcome these rejections and add no new matter.

Amended Claim 1 recites a printer system that includes a printer adapted to print a digital location pattern to be read by an optical reading device, where the location pattern includes a plurality of dots, each having a substantially predetermined size and nominal position in the pattern. The system also includes a user interface component and a processing component adapted to modify at least some of the dots prior to printing such that the optical centre of gravity of the modified dots more closely coincides with their nominal positions, and the printer is adapted to print the location pattern and human-discriminable content on the same carrier. Support for the amendments can be found in the Specification (See page 25, lines, 1-14 and page 9, lines 9-24).

*Wiebe* discloses generating a printout of a section of a global position-coding pattern in a system comprising a computer unit and a printer unit connected to the computer unit. *Wiebe*, however does not teach or suggest a printer adapted to print a digital location pattern to be read by an optical reading device. Furthermore, *Wiebe* also fails to disclose a user interface component and a processing component adapted to modify at least some of the dots prior to printing such that the optical centre of gravity of the modified dots more closely coincides with their nominal positions, as admitted by the Office Action.

The Office Action alleges that the admitted deficiency of *Wiebe* is cured by *Wang*. However, *Wang* teaches correcting digital image signals for effects of printed dot overlap generated by a chosen printer prior to printing. *Wang* does not even hint a printer adapted to print a digital location pattern to be read by an optical reading device. Neither does *Wang* teach printing the digital location pattern to be read by an optical reading device and human-

discernible content on the same carrier. While teaching converting handwritten notes to a digital format by a handheld device, the third reference, *Ericson*, also fails to cure the deficiencies of the first two references in rendering amended Claim 1 obvious. Therefore, Claim 1 is in condition for allowance, and notice to that effect is respectfully requested.

Claims 2, 4, 6, and 14 depend from amended independent Claim 1 with additional features. As discussed above, Claim 1 is allowable over *Wiebe*, *Wang*, and *Ericson*, individually or in combination. Therefore, Claims 2, 4, 6, and 14 are allowable for the same reasons as discussed above for Claim 1 and by virtue of their additional features.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267) and further in view of *Ericson* (US 2002/0011989) as applied to claim 1, and further in view of *Teremy* et al. (US 5,634,156).

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267), *Ericson* (US 2002/0011989), and further in view of *Teremy* et al. (US 5,634,156) as applied to claim 3 above, and further in view of *Iwata* et al. (US 4,955,736).

Claims 7, 8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267) and further in view of *Ericson* (US 2002/0011989) as applied to claim 6 above, and further in view of *Amato* (US 5,175,694).

Claims 11, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267), *Ericson* (US 2002/0011989) and further in view of *Amato* (US 5,175,694) as applied to claim 10 above, and further in view of *Yosefi* (US 6,509,903).

Claims 15, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267) and further in view of *Ericson* (US 2002/0011989) as applied to claim 14 above, and further in view of *Rhoads* et al. (US 7,054,463).

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Wang* (US 5,469,267) and further in view of *Ericson* (US 2002/0011989) as applied to claim 1 above, and further in view of *Murl* (US 6,379,779).

Claims 3, 5, 7-13, and 15-19 depend from amended Claim 1 with additional features. As discussed above, Claim 1 is allowable over *Wiebe*, *Wang*, and *Ericson*, because at least the printer adapted to print a digital location pattern to be read by an optical reading device and the printing the digital location pattern to be read by an optical reading device and human-discriminable content on the same carrier features are not taught or suggested by the cited references. The additional references *Teremy*, *Iwata*, *Amato*, *Yosefi*, *Rhoads*, and *Murl* fail to cure the deficiencies of *Wiebe*, *Wang*, and *Ericson* in disclosing the discussed elements. Therefore, Claims 3, 5, 7-13, and 15-18 are allowable for the same reasons as discussed above for Claim 1 and by virtue of their additional features. Notice to that effect is respectfully requested. Claim 19 has been cancelled without prejudice or disclaimer.

Claims 21-29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe* et al. (US 2002/0159089) in view of *Teremy* et al. (US 5,634,156), and further in view of *Wang* (US 5,469,267) and *Ericson* (US 2002/0011989).

Amended Claim 21 recites a method of generating a digital location pattern comprising a plurality of dots to be read by an optical reading device, where the method includes assigning an asymmetrical shape to at least some of the dots in the pattern area such that when printed, the

optical centre of gravity of those dots substantially coincides with the corresponding nominal positions. According to amended Claim 21, the digital location pattern to be read by an optical reading device is adapted for printing with human-discriminable content on the same carrier.

As discussed above, *Wiebe*, *Wang*, and *Ericson* fail to render at least the digital location pattern to be read by an optical reading device and the printing the digital location pattern to be read by an optical reading device and human-discriminable content on the same carrier features of Claim 21. *Teremy*, while disclosing exposing patches on a film such that a printer can establish the orientation of the film relative to the camera during the exposure, does not teach or suggest the above listed elements either. Therefore, amended Claim 21 is allowable over the cited references.

Claims 22-28 depend from amended Claim 21 with additional features. As discussed above, Claim 21 is allowable over *Wiebe*, *Wang*, and *Teremy*, because several features of the claim are not taught or suggested by the cited references. Therefore, Claims 22-27 are allowable for the same reasons as discussed above for Claim 21 and by virtue of their additional features. Notice to that effect is respectfully requested. Claim 28 has been cancelled without prejudice or disclaimer.

Amended Claim 29 recites a printer system comprising a printer and a computing component, where the printer is adapted to print a digital location pattern to be read by an optical reading device, the pattern including a plurality of dots, and the computing component is arranged to introduce an asymmetry into the shape of at least some of dots prior to printing the pattern. The printer according to Claim 29 is adapted to print said location pattern and human-discriminable content on the same carrier.

As discussed above, several features of amended Claim 29, which are similar to Claims 1 and 21 are not taught or suggested by *Wiebe, Wang, Ericson, and Teremy*, individually or in combination. Thus, amended Claim 29 is not rendered obvious by the cited references, and the rejection should be withdrawn.

Amended Claim 31 recites a printer system adapted to print a digital location pattern to be read by an optical reading device comprising a plurality of dots, the dots having a first dimension lying between predetermined limits and each dot having an optical centre of gravity located at predetermined nominal positions in the pattern. A computing component of the system according to Claim 31 is adapted to modify the pattern prior to printing by introducing an asymmetry to the dot shape of selected dots, substantially without causing the first dimension to exceed its predetermined limits, such that when printed on a pre-selected printer the optical centre of gravity of the selected dots more closely coincides with their corresponding nominal positions, where the pre-selected printer of the system is adapted to print said location pattern and human-discriminable content on the same carrier.

Not only do the cited references fail to render the above discussed elements of amended Claim 31 obvious, but they also do not teach or suggest introducing an asymmetry to the dot shape of selected dots, substantially without causing the first dimension to exceed its predetermined limits. Therefore, Claim 31 is in condition for allowance, and notice to that effect is respectfully requested.

Amended Claim 32 recites a digital location pattern to be read by an optical reading device arranged for use with a system comprising a pattern space having a plurality of dots each having a nominal position, the pattern having a plurality of dots, at least some of which having an asymmetric shape, having no more than one axis of symmetry, the asymmetric shape causing

the optical centre of gravity of those dots to be located substantially at the corresponding predetermined nominal position, where the digital location pattern is adapted for printing with human-discernible content on the same carrier. As mentioned previously, the cited references fail to disclose at several features of this claim similar to Claims 1, 21, 29, and 31. Furthermore, the references also do not teach at least some of the dots having an asymmetric shape, having no more than one axis of symmetry, and the asymmetric shape causing the optical centre of gravity of those dots to be located substantially at the corresponding predetermined nominal position.

Therefore, Claim 32 is also in condition for allowance.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Wiebe et al.* (US 2002/0159089) in view of *Ericson* (US 2002/0011989).

Amended Claim 30 recites a printer system adapted to print a digital location pattern to be read by an optical reading device comprising a plurality of dots each offset from a nominal position in one of a plurality of directions, where a computing component of the system is arranged to modify the degree of offset of each dot from its nominal position by modifying the shape of each dot, and where a printer of the system is adapted to print the location pattern and human-discernible content on the same carrier. Once again, the cited references fail to disclose a digital location pattern to be read by an optical reading device or printing the digital location pattern and human-discernible content on the same carrier. Thus, amended Claim 30 is allowable over the cited references, and notice to that effect is respectfully requested.

## CONCLUSION

In view of the foregoing remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims. The preceding arguments are based only on the arguments in the Office Action, and therefore do not address patentable aspects of the invention that were not addressed by the Examiner in the Office Action. The claims may include other elements that are not shown, taught, or suggested by the cited art. Accordingly, the preceding argument in favor of patentability is advanced without prejudice to other bases of patentability. Furthermore, the Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicant declines to automatically subscribe to any statement or characterization in the Office Action.

Respectfully Submitted,

ADORNO & YOSS, LLC  
1349 West Peachtree Street, N.E.  
Suite 1500  
Atlanta, Georgia 30309

(404) 347-8507  
(404) 347-8505 (Direct)



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Carl K. Turk  
Reg. No. 59,675

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PATENT TRADEMARK OFFICE